IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1 (currently amended): A data communication system comprising:

a source node adapted to transfer object data;

one or more destination nodes adapted to receive the object data transferred from said source node; and

a controller adapted to set a logical connection between [[the]] said source node and [[the]] said one or more destination nodes,

wherein said source node is adapted (a) to obtain connection information indicating the logical connection from said controller, (b) to set a segment size in accordance with [[the]] reception capability of a respective destination node in order to divide the object data into one or more segments, (c) to divide the object data into one or more segments in accordance with the segment size, and (d) to transfer packets including both data in the one or more segment and the connection information from said source node to said one or more destination nodes via a serial bus.

Claims 2 - 7 (canceled)

Claim 8 (previously presented): A data communication system according to

claim 1, wherein each said destination node includes a receiving buffer, and wherein said source node is adapted to set the segment size in accordance with a size of said receiving buffer in each destination node.

Claim 9 (currently amended): A data communication system according to claim 1, wherein said source node is adapted to set the segment size in accordance with [[the]] a maximum payload size of each destination node.

Claim 10 (previously presented): A data communication system according to claim 1, wherein said source node is adapted to set the segment size in accordance with the lowest reception capability.

Claim 11 (previously presented): A data communication system according to claim 1, wherein the segment size of each segment is variable.

Claims 12 - 20 (canceled)

Claim 21 (previously presented): A data communication system according to claim 1, wherein the serial bus conforms to IEEE 1394-1995 standard.

Claim 22 (previously presented): A data communication system according to claim 1, wherein the object data includes image data.

Claim 23 (canceled)

Claim 24 (currently amended): A method of transferring object data from a source node to one or more destination nodes, said method comprising the steps of:

providing connection information indicating a logical connection between the source node and the one or more destination nodes from a controller to the source node, ~~wherein~~ the logical connection between source node and the one or more destination nodes [[is]] <u>being</u> set by the controller;

setting a segment size in accordance with [[the]] reception capability of a respective destination node in order to divide the object data into one or more segments;

dividing the object data into one or more segments in accordance with the segment size; and

transferring packets including <u>both</u> data in the one or more segment and the connection information from the source node to the one or more destination nodes via a serial bus.

Claims 25 - 27 (canceled)

Claim 28 (currently amended): A data communication apparatus which transfers object data to one or more destination nodes, said data communication apparatus comprising:

a control unit adapted (a) to obtain connection information indicating a

logical connection between [[the]] a source node and the one or more destination nodes from a controller, ~~wherein~~ the logical connection between said data communication apparatus and the one or more destination nodes [[is]] being set by the controller, (b) to set a segment size in accordance with [[a]] reception capability of a respective destination node in order to divide the object data into one or more segments, and (c) to divide the object data into one or more segments in accordance with the segment size; and

a data communication unit[[,]] adapted to transfer packets including both data in the one or more segment and the connection information from said data communication apparatus to the one or more destination nodes via a serial bus.

Claims 29 - 33 (canceled)

Claim 34 (previously presented): A method according to claim 24, wherein said transfer step includes continuously transferring data in each segment from the source node to the one or more destination nodes via the logical connection.

Claim 35 (previously presented): A method according to claim 24, wherein the segment size is set in accordance with a size of a receiving buffer in each destination node.

Claim 36 (currently amended): A method according to claim 24, wherein the segment size is set in accordance with [[the]] a maximum payload size of each destination node.

Claim 37 (previously presented): A method according to claim 24, wherein the segment size is set in accordance with the lowest reception capability.

Claim 38 (previously presented): A method according to claim 24, wherein the segment size of each segment is variable.

Claim 39 (canceled)

Claim 40 (previously presented): A method according to claim 24, wherein the serial bus conforms to IEEE 1394-1995 standard.

Claim 41 (previously presented): A method according to claim 24, wherein the object data includes image data.

Claim 42 (canceled)

Claim 43 (currently amended): A data communication apparatus according to claim 28, wherein each [[said]] destination node includes a receiving buffer and wherein said control unit is adapted to set the segment size in accordance with a size of said receiving buffer in each destination node.

Claim 44 (currently amended): A data communication apparatus according to

claim 28, wherein said control unit is adapted to set the segment size in accordance with [[the]] a maximum payload size of each destination node.

Claim 45 (previously presented): A data communication apparatus according to claim 28, wherein said control unit is adapted to set the segment size in accordance with the lowest reception capability.

Claim 46 (previously presented): A data communication apparatus according to claim 28, wherein the segment size of each segment is variable.

Claim 47 (canceled)

Claim 48 (currently amended): A data communication apparatus according to claim 28, wherein the serial bus conforms to IEEE 1394-1995 standard.

Claim 49 (previously presented): A data communication apparatus according to claim 28, wherein the object data includes image data.